Oregon Nonpoint Source Program 2016 Annual Report

1. Introduction

General Description of Report

This **Oregon Nonpoint Source Pollution Program 2016 Annual Report** meets the requirements of section 319 (h) (8) and (11) of the Federal Clean Water Act (CWA) (33 USC 1329). The report documents the activities and accomplishments of the Oregon Department of Environmental Quality (DEQ) implementation of the State's Nonpoint Source (NPS) Program.

The report provides a summary of the NPS activities implemented by the State during the period January – December 2016 and highlights the progress Oregon is making toward meeting the substantial challenges presented by NPS water pollution. The 2016 Oregon NPS Annual Report includes progress updates on milestones, implementation targets and annual reporting requirements identified in the 2014 Oregon Nonpoint Source Management Plan. Annual status updates help to ensure that section 319 funding, technical support and other resources are directed in the most effective and efficient manner.

Commented [WP1]: Good question- I'm thinking Karla may be able to speak to this…?

Commented [ba2]: Is there a statistic about the percentage of impairments caused by NPS to add here?

NPS Programmatic Achievements

The State Water Quality Program continues to use innovative, cooperative, and community-based methods to improve water quality affected by nonpoint sources of pollution. This is done through the strategic implementation of the following program priorities: (1) working with state, local and national partners on water quality protection and restoration; (2) supporting and encouraging implementation of TMDLs; and (3) monitoring Oregon's water quality to support water quality program needs, identify emerging issues, understand water quality status and trends, and to inform management activities targeted at restoring Oregon's water quality and beneficial uses.

A portion of DEQ's nonpoint source program activities are funded through the EPA and DEQ 2016-2018 Performance Partnership Agreement (PPA). These funds maintain **9.74 FTE** positions within DEQ that support the implementation of NPS and 319 funded activities such as: management of nonpoint sources of pollution; water quality standards and assessment; TMDLs; DEQ's groundwater program; and water quality data analysis, management and monitoring.

2016 accomplishments

Commented [ba3]: These highlights are more for the WQ Program, need specifics for NPS:
- Leveraged how much money from OWEB for restoration projects?
- Developed how many Watershed plans?
- Provided education or TA to who?
- Held any workshops, trainings, etc?

- Distributed $$$$ in 2016 §319 grants to fund projects in Oregon's priority basins and groundwater management areas
- Closed out ## completed restoration projects.
- Updated Oregon's Nonpoint Source Management Program Plan
- Participated in discussions regarding revisions to the Forest Practices Act riparian rule change for Salmon, Steelhead, and Bull Trout (SSBT) streams on private forestlands.
- Worked with ODA to review agriculture area rules and plans, select Strategic Implementation Areas, and revise methods for evaluation of landscape metrics related to water quality standards and TMDL allocations.
- Collaborated with the BLM on Resource Management Plans for Western Oregon to ensure protection of state water quality.

Commented [A4]: What were those projects?

Commented [WP5]: Ivan should be able to compile this info

Commented [WP6]: Ivan should be able to compile this info

Commented [A7]: Did anything happen? Isn't this why we didn't get the NPS funds? How did DEQ participate?

Commented [WP8]: Josh Seeds could address this

Commented [WP9]: Josh Seeds for 2016 work (Koto moving forward, though).;

Commented [A10]: Need more specificity

Commented [A11]: How??

Roadblocks

In 2015, EPA reduced DEQ's 319 grant funds because EPA and NOAA determined that Oregon did not submit a fully approvable Coastal Nonpoint Control Program under the Coastal Zone Act Reauthorization Amendments (CZARA). The Program was not fully approvable because of gaps in Oregon's program related to forestry to meet or maintain water quality standards and to protect beneficial uses. The four areas that EPA and NOAA identified as needing additional work were: protection of riparian areas for small and medium fish-bearing streams and non-fish bearing streams from increases in stream temperatures; programs to address runoff from forest roads built prior to modern construction and drainage standards; measures to protect areas of high landslide risk, and tools to reduce the risk of such landslides; and programs to assure that forest operators are complying with federal law governing the aerial application of herbicides. In March of 2016, EPA and

Commented [A12]: Maybe more information with specifics of failure of forest practices

NOAA notified DEQ that Oregon's 2015 grant funds would be redistributed to other states and territories that have approved coastal nonpoint programs. In 2016, §319 pass-through grant funds were also reduced and totaled $333,501.

Total FFY 2016 Appropriation:	$2,153,000.00
Less penalty (30% of (reduced) 2015 grant award of $1,451,800):	$435,540.00
Minus PPG for FTE:	$1,383,959.00
Available for pass through grants:	$333,501.00

Oregon Water Quality NPS Program

The water quality NPS program's mission is to protect and improve Oregon's water quality. Oregon's rivers, streams, lakes, estuaries and groundwater resources provide for multiple beneficial uses such as drinking water, fish and aquatic wildlife habitat, recreation and irrigation. Protecting water quality also protects beneficial uses, the environment and Oregon's economy.

The framework of the program's mission is built around developing and implementing water quality standards and TMDLs. Standards and TMDLs are used to identify which tools and actions are needed in order to protect beneficial uses. This science-based approach has helped to produce a diverse set of tools, which utilize regulatory, voluntary, financial, and technical assistance approaches to achieve a balanced program.

Commented [WP13]: Copied and pasted for below. This less specific language seems more appropriate for an Intro…?

The program also continues to collect and evaluate water quality data in order to assess and adapt tools that address priority water quality issues. An ongoing priority, as outlined in the Performance Partnership Agreement (PPA) with EPA, is to actively manage and control nonpoint sources of pollution that impact Oregon's waterways. Progress in carrying out NPS measures is tracked through successful execution of four different yet related efforts (Figure 1).

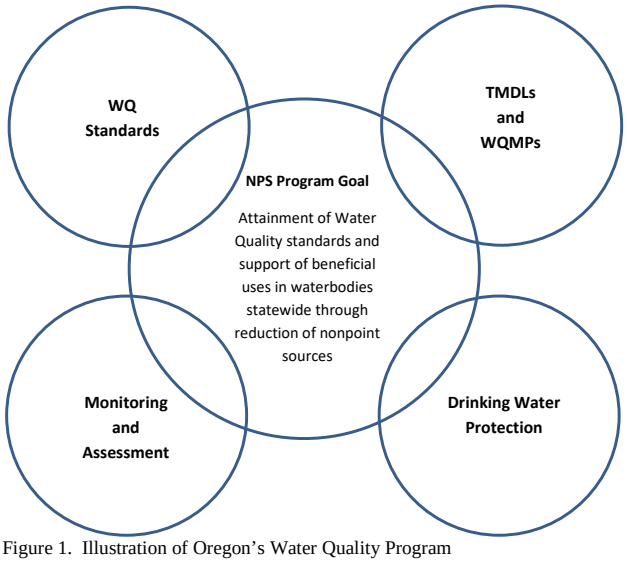
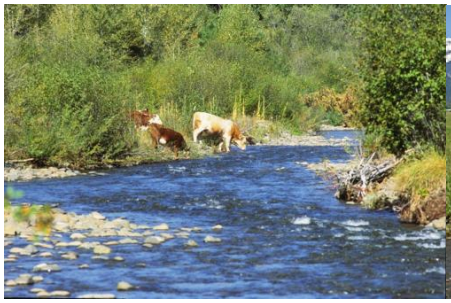


Figure 1. Illustration of Oregon's Water Quality Program

2. Oregon's Nonpoint Source Program

The Oregon NPS Management Program strategy involves baseline water quality management programs in conjunction with regulatory, voluntary, financial, and technical assistance approaches to achieve a balanced program. The primary components of the NPS program are: assessment, planning, implementation, and education.




Assessment

One of the Primary components of the Oregon NPS Management Program is the collection and assessment of water quality data. Oregon DEQ conducts both routine ambient monitoring and special studies such as toxics monitoring, groundwater monitoring and pesticide monitoring. In addition to samples collected by the DEQ, the Volunteer Monitoring Program collects and submits data from across the state. Since its inception in the mid 1990's, over 50 groups around the state have participated in the program. This collaboration between DEQ and local watershed councils, Soil and Water Conservation Districts, non-governmental organizations and tribes supports both watershed assessment and TMDL development.

Data are assessed by the DEQ to determine if a water body is in attainment of its water quality standards and whether its designated uses are supported. For waters identified as impaired, TMDLs will be developed. Data are also used to characterize the potential sources of pollution, model the pollutant loads and assess the effectiveness of Best Management Practices (BMPs).

The federal Clean Water Act requires states to submit information to EPA on a biennial basis to identify impaired waters needing Total Maximum Daily Loads (Section 303(d)) and to report on the overall condition of waters of the state (Section 305(b)). DEQ's funding and staffing for the Water Quality Assessment program have been inadequate to regularly produce biennial Integrated Reports required by the CWA. As a result, Oregon has produced only four Integrated Reports since 2000, the last one approved in 2010.

Provide Summary table of the 2012 IR (How many segments are attaining, how many need TMDLs? What are the top 3 impairments in the state? Provide status update of 303(d) process – where is Oregon at?

Planning

An update to Oregon's NPS Plan was completed in 2014. The updates reflect current and planned goals, priorities, actions and milestones for the next five years. This five-year plan then provides the basis for tracking annual progress under the program. Since many EPA and state rules, regulations, and programs continue to evolve, EPA expects all states to review and, as appropriate, revise and update their NPS Management Program Plan every five years. An updated, comprehensive program is critical to ensuring that section 319 funding, technical support and other resources are directed in the most effective and efficient manner. The current Oregon Nonpoint Source Management Plan describes the goals, priorities, objectives, and strategies of the Oregon Nonpoint Source Program (NPS Management Program) used to achieve the mission to protect, prevent, control, and eliminate water pollution from nonpoint sources in "waters of the state" and to meet water quality standards and Total Maximum Daily Load (TMDL) allocations. This is the basis for the short and long-term goals summarized below (Table X).

Long-Term Goals	Progress Toward Achieving
Attainment of Water Quality standards and support of beneficial uses in waterbodies statewide.	# of waterbodies delisted or segments attaining standards or identified as Category 1 in IR
Short-Term Goals	**Progress Toward Achieving**
Use the Pesticide Stewardship Partnership to target nonpoint source loading in priority areas.	PSP Program expansion – new priority areas # sites monitored
Empower Oregonians at the local level through the Volunteer Monitoring Program to assist in identifying and solving the state's water quality problems.	# of volunteer monitoring groups # of streams Data collected
Work with Oregon Department of Agriculture to focus technical assistance and funding in areas impacted by agricultural nonpoint source pollution using the Status and Trends tool.	# of priority watersheds identified $$ of technical assistance
Promote educational opportunities for designated management agencies, which facilitate implementation of TMDLs through the reduction of nonpoint sources.	DMA Meetings - # per basin or region Trainings offered?
Continue to support TMDL development for the Mid Coast, South Coast, and Upper Deschutes basins, begin development of the Powder/Burnt basin TMDL and update the Klamath and Hood River TMDLs.	TMDL development status – expected completion dates
Provide timely and efficient nonpoint source pollution complaint response by working with local jurisdictions to mitigate for or prevent NPS pollution.	Total # of complaints responded to % closed within 90 days

Implementation

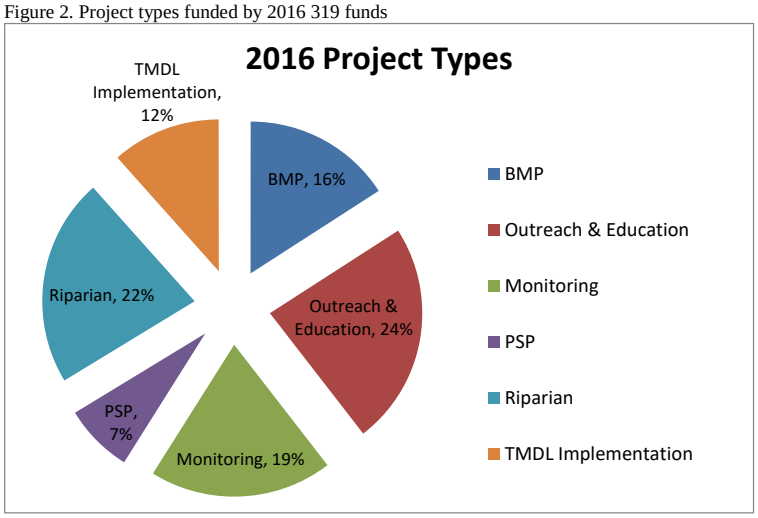
Oregon's Nonpoint Source Program is implemented by targeting land uses and their associated nonpoint pollution sources from agricultural lands; state, private, or federal forest lands; or in urban areas. The goal of the NPS program has been broadened to safeguard groundwater resources as well as surface water. The state has been divided into 21 watershed basins and 91 sub-basins. The state's permitting and assessment work has been aligned and prioritized according to these sub-basins. Forty-three local, state, and federal regulatory and non-regulatory programs address nonpoint source control and treatment.

Commented [ba14]: Provide map and/or table with basins and priorities

Implementation of the NPS program is administered through the federal Clean Water Act; state water quality standards, the total maximum daily load rule, the Coastal Zone Act Reauthorization Amendments (section 6217-Coastal NPS Control Program), the National Estuary Program, the Forest Practices Act, the Oregon Plan for Salmon and Watersheds, the Agricultural Water Quality Act, the State Land Use Planning Program, as well as state drinking water and groundwater protection programs. DEQ allocates Section 319 funds to help communities implement restoration projects to address waterbodies impaired by nonpoint source pollution In 2016, a Section 319 grant allocation of $333,501 funded 20 projects across the state. How many (#) NPS impaired watersheds did this address?

During the Request for Proposal (RFP) process, DEQ identified specific regional priorities for implementation of the Oregon 319 NPS Grant. These priorities provide the framework for which projects are selected. Figure 2 illustrates the types of projects that were funded in 2016.

Figure 2. Project types funded by 2016 319 funds



Implementation of the NPS program also relies heavily on designated management agencies and their TMDL implementation plans. The TMDL implementation plan describes the selected management strategies and measurable milestones necessary to prevent, control, and/or treat specific sources of the TMDL pollutant in sufficient detail (i.e. providing program components, siting criteria and operating methods/procedures) to inform DEQ's independent and objective review and effectiveness evaluation. The TMDL implementation plan must also include implementation timelines and performance monitoring, with reasonable assurance that the strategies described in the plan will work. To date: Identify numbers of TMDLs that have been completed, # of designated management agencies (DMAs), % of DMAs reporting on time.

Commented [A15]: May need to define PSP

Commented [ba16]: Include example TMDL implementation plan in appendix

Education

The fourth and final component of Oregon DEQ's NPS Program is to increase and maintain public awareness of water quality and nonpoint source pollution through effective education and outreach programs. One of the most effective means of outreach is through placed based education. This approach, which engages the public with their watershed, is accomplished through DEQ's Volunteer Water Quality Monitoring Program. Since its inception in 1997, the program has assisted more than 50 partner organizations around Oregon to gather environmental data from rivers and streams. The DEQ Laboratory manages the volunteer program and trains and equips community groups, so they can gather data and answer questions about local stream conditions. Local communities make use of water monitoring feedback to assist with their environmental stewardship efforts. In addition, DEQ uses these data for watershed assessment and reporting, and to determine if water bodies meet water quality standards. Data are also used

to inform development of water quality improvement plans. In 2016, five of the 20 NPS Grant funded projects were for education and outreach.

DEQ's restoration partners, such as OWEB and SWCDs, also provide significant support for outreach and education. Forty-five percent of investments fund water quality related outreach and education activities such as: increasing the organizational capacity of local community groups who perform on the ground work; increasing awareness of landowners of the value of healthy watersheds; effectiveness monitoring to determine project success; watershed workshops and field experiences for K-12 students, adults, and field professionals.

Education and Outreach is also a fundamental component of DMA TMDL implementation plans. DMAs support local creek cleanups, organize Earth Day activities, participate in the Salmon Watch program and provide local water quality information on regional websites, such as Stream Smart.

# of outreach activities provided by DEQ

Commented [WP17]: 45% of which funds- OWEB or OWEB plus SWCD, or DEQ investments only…?

Commented [ba18]: These are just outreach activities in the Rogue. What are some other education and outreach that DMAs provide?

Commented [WP19]: I don't think DEQ actually provides outreach activities per se, but we do support activities organized by partners…other than Volunteer Monitoring and PSP, I'm not sure what types of events we actually spearhead?

Program Funding

Federal Section 319(h), funds are provided annually through the EPA to States for the development and implementation of each State's NPS Management Program. In Oregon the 319 grant dollars are divided between PPG funds which fund NPS staff positions and pass through funds which support priority projects that are funded through the NPS Grant Program. DEQ administers this program to provide~~s~~ funding to stakeholders for activities that address the goals and objectives of the NPS Management Program. (Table 6 from the 2014 Oregon NPS Plan).

DEQ targets NPS Grant funds for the following types of projects: TMDL implementation plans, surface and ground water quality monitoring, data analysis and modeling, demonstration of innovative BMPs, technical assistance to landowners for conservation planning, public outreach based education, implementation, development of EPA's nine-element watershed plans, and monitoring activities to determine the effectiveness of specific pollution prevention methods. As illustrated in Figure 2, money from 2016 funded: BMP implementation, outreach and education, monitoring, riparian restoration, TMDL implementation and the Pesticide Stewardship Partnership.

Commented [ba20]: Provide some shortened version of Table 6 in 2014 NPS plan

Commented [A21]: Show breakout of current projects, not just 2016 as bar graph

Clean Water State Revolving Fund

The Clean Water State Revolving Fund loan program provides low-cost loans to public agencies for the planning, design or construction of various projects that prevent or mitigate water pollution. Eligible agencies include federally recognized Indian tribal governments, cities, counties, sanitary districts, soil and water conservation districts, irrigation districts, various special districts and certain intergovernmental entities.

DEQ partners with Oregon communities to implement projects that attain and maintain water quality standards, and are necessary to protect beneficial uses. In 2016 DEQ made XXX Clean Water State Revolving Fund (CWSRF) loans to nonpoint source projects. Since the loan program's inception in 1989, DEQ has provided $75 million for various nonpoint source projects.

For almost two decades, DEQ's CWSRF staff has administered Oregon's implementation of EPA's Clean Watershed Needs Survey. This national survey and other recent studies consistently indicate nonpoint sources of pollution continue to be an important source of water impairment. DEQ's CWSRF loan program continues to look for effective avenues to financially support projects that address nonpoint source pollution.

Commented [WP22]: Bob Haberman or Chris Bayham good place to start fro inquiries

Commented [ba23]: What percent of funding went to NPS projects??

Drinking Water Revolving Loan Fund

In Oregon, the Drinking Water Revolving Loan Fund (DWRLF) is administered by the Oregon Health Authority (OHA), the state agency that regulates drinking water under state law and the Safe Drinking Water Act. OHA works cooperatively with DEQ on source water protection efforts. Money from the DWRLF is used to fund: Source Water Protection Grants (up to $30,000) to fund source water protection activities, monitoring, and planning in Drinking Water Source Areas (DWSAs); loans for improving drinking water treatment, source water protection activities, or land acquisition in DWSAs; and DWRLF set-asides for administration of funds for five Drinking Water Protection positions at Oregon DEQ, which delineate DWSAs, integrate Clean Water Act programs (including the NPS Program) with source water protection needs, provide technical assistance to public water systems, and research NPS impacts on surface and ground drinking water sources.

In 2016, how many?? DWRLF projects were recommended for funding with funding awards totaling $how much??. The projects intend to address the following nonpoint source issues: ??????.

Commented [A24]: Contact Sharee about problematic areas where NPSs create drinking water problems.

Onsite Wastewater Management Program

Over 30 percent of Oregonians rely on septic systems for their homes and businesses. DEQ regulates septic system siting, design, installation and maintenance. Without this oversight, septic systems can fail or malfunction, pollute Oregon's land and waterways with raw sewage and create public health hazards. In 2016, DEQ and regional nonprofit lender Craft3 came together to make septic system repairs more affordable. As of October 31, 2016, approximately one-third of project funding had already been allocated. Of the 10 applications received: 2 closed for $30,455, which will result in the treatment of 394,000 gallons of wastewater; 2 are in the closing process ($35,000); and 5 are in the underwriting stage ($79,325).

Commented [A25]: Add section on On-site response to meeting CZARA conditions and the program effectiveness

Commented [WP26]: Randy Trox should be able to provide this

3. Integration of Nonpoint Source Program

Water Quality Standards

The water quality program's mission is to protect and improve Oregon's water quality. Protecting Oregon's rivers, streams, lakes, estuaries and groundwater quality keeps these waters safe for multiple beneficial uses such as drinking water, fish and aquatic wildlife habitat, recreation and irrigation. This is accomplished through the development and implementation of water quality standards, collection and evaluation of water quality data, development of TMDLs to allocate pollutant loads for point and nonpoint sources, and through grants and technical assistance to reduce nonpoint pollution sources. Establishing water quality standards for the state of Oregon is at the core of DEQ's water quality activities. Accomplishments of the WQ Standards Program in 2016 include:

- EQC adopted revised copper criteria in November 2016
- Author copper criteria implementation guidance document.
- EQC approved revisions to the water quality standards for bacteria and clarification of its associated uses
- DEQ is conducting a rulemaking to designate the North Fork Smith River and its tributaries and wetlands as Outstanding Resource Waters

In addition to its successes, 2016 was a challenging year for litigation of the Natural Conditions Criteria for temperature and possible impacts to previously approved temperature TMDLs. In 2012, Northwest Environmental Advocates (NWEA) 2012 filed suit against EPA challenging Oregon's temperature TMDLs, the Willamette Mercury TMDL and the Klamath Temperature TMDL. On October 12, the Magistrate Judge recommended that the district judge find in favor of NWEA on two related CWA challenges. He concluded that EPA's decision approving TMDLs issued on or after 9/27/2006 that used the natural conditions criterion was "arbitrary and capricious." The Magistrate's conclusion was largely based on the earlier temperature standards case that concluded that EPA's decision to approve the Natural Conditions Criteria (NCC) was arbitrary and capricious. The Magistrate instructed the parties to the litigation (which included DEQ) to negotiate potential remedies that would address this decision. The Klamath Temperature TMDL and the Willamette Mercury TMDL were remanded to EPA for further action, and a two-year time limit for further action was placed on both TMDLs. He also recommended the Willamette Mercury TMDL remain in place during that period of time. The Magistrate Judge also recommended that the parties negotiate the remedy and if agreement can't be reached, then the parties should return to court to determine the appropriate remedy. The Magistrate's recommendation is under consideration by the District Judge and will ultimately make the final decision. Next steps for DEQ are still under consideration.

Commented [A27]: Provide any further updates to litigation; possible strategies going forward

Monitoring and Assessment

Every two years, DEQ is required to assess water quality and report to EPA on the condition of Oregon's waters in the Integrated Report. The Integrated Report includes an assessment of each water body where data are available, a comparison of water quality information to Oregon's water quality standards, and identification of the Section 303(d) list of water quality limited waters needing a TMDL. DEQ uses the list of impaired waters to set priorities for TMDL development. DEQ's monitoring provides data that is collected to support decisions and for implementing the NPS Management Program.

The Integrated Report provides a comprehensive evaluation of water quality throughout the state. The NPS Management Program uses information from the Integrated Report and the 303(d) list of impaired waters to identify the waters and watersheds where pollutants are likely related to nonpoint sources in the watersheds. DEQ then can focus and prioritize 319 program activities to protect, prevent, control, and eliminate NPS pollution.

The Integrated Report information can also complement and support basin-planning efforts, development of basin-based water quality status and action plans, and assist in allocating resources between impaired and unimpaired waters. Data is collected for the Integrated Report through both routine ambient monitoring and special studies such as toxics monitoring, groundwater monitoring and pesticide monitoring. In addition to samples collected by the DEQ, the Volunteer Monitoring Program collects and submits data from across the state as well as various other SWCDs, watershed groups and designated management agencies. Highlights of the Monitoring and Assessment program for 2016 include:

- Ambient Monitoring Network -DEQ will continue to monitor approximately 130 ambient water quality station 6 times annually throughout Oregon.
- Toxics monitoring –
- Collected water quality data to support TMDL development in the South Coast, Mid Coast and Deschutes basins
- Volunteer monitoring Program HIGHLIGHTS
- Groundwater monitoring HIGHLIGHTS

Commented [A28]: Include discussion of database issues: problem identification, interim steps, long-term fixes and timeline for fixes

TMDLs and Water Quality Management Plans

The federal Clean Water Act requires that water pollutant reduction plans, called TMDLs, be developed for water bodies that are listed in Category 5 of the Integrated Report (303(d) List). TMDLs describe the maximum amount of pollutants that can enter the river or stream and still meet water quality standards.

TMDLs take into account the pollution from all sources, including discharges from industry and sewage treatment facilities; runoff from farms, forests and urban areas; and natural sources. TMDLs include a margin of safety to account for uncertainty. TMDLs may include a reserve capacity that allows for future discharges to a river or stream. DEQ typically develops TMDLs on a watershed, subbasin, or basin level and occasionally at the reach level depending on the type and extent of impairments.

The Water Quality Management Plan (WQMP) is the framework for TMDL implementation that is issued by Oregon along with the TMDL (OAR 340-042-0040(l)). The WQMP lays out the strategies for TMDL implementation, serves as a multi-sector plan and provides the reasonable assurance that the TMDL will be implemented and allocations achieved. TMDL Program achievements in 2016 include:

Commented [A29]: Crosswalk to determine whether or not WQMPs also act as WBPs.

- Facilitated two DMA meetings to discuss status of TMDL implementation in the Willamette River Basin
- Approximately XX% of Willamette DMAs successfully implementing TMDL Plans, as documented through the Annual Report process
- Approximately 100% of Rogue and Bear Creek Basin DMAs successfully implementing TMDL Plans, as documented through the Annual Report process
- In 2016 Basin Coordinators facilitated XXX technical assistance workshops specific to XXXXX TMDL Plan elements
- Participated in XXX LAC meetings for revisions to Agricultural Management Plans
- % of complaints responded to closed within 90 days
- Statewide TMDL training for Basin Coordinators
- Development of XXXX new TMDL implementation plans for X number of parameters

Commented [A30]: Provide discussion on how TMDL rules for development, submittal and implementation of DMA responsibilities is working

Drinking Water Protection

The State of Oregon Drinking Water Protection Program works to implement strategies that ensure the highest quality water is provided to public intakes and wells. Mandated by the 1996 Federal Safe
Drinking Water Act (SDWA), Source Water Assessments including identification of risk associated with the land management activities in drinking water source areas have been completed for all public water systems that have at least 15 hookups, or serve more than 25 people year-round.

Technical assistance is available to all public water systems and their communities to implement protection and restoration activities that address point and nonpoint sources of pollution that were identified in the Source Water Assessments (completed from 2000 through 2005) and more recent risk identification based on more advanced data and improved GIS capabilities.

DEQ's drinking water protection program and the NPS Management Program collaborate to help identify, prioritize and implement best management practices for water quality improvements that address harmful algal blooms, nutrients, turbidity, microbes and toxics. The objectives of the collaboration include optimizing agency resources by focusing on the highest priority pollutants in a coordinated way, implementing actions that reduce toxic pollutants at the source, and establishing partnerships with other agencies and organizations to increase the effective use of public and private resources.

Highlight from 2016 include:

- The November 19, 2016 agriculture and commercial pesticide waste collection event in McMinnville netted 49,151 lbs from 45 participants, and set the record for the greatest quantity of pesticide waste collected at one of these types of events in Oregon. And minimizing sources of turbidity to drinking water intakes
- Participation in SWV GWMA events.
- Spring garden show in Rogue
- XXXXXXX

4. NPS Project Level Achievements in 2016

In 2016, DEQ allocated $333,501 to 319 NPS Pass-Through Grant Projects. The 319 Nonpoint Source Pass-Through Grant funds targeted priority basins for specific NPS pollutants to effectively improve water quality. A total of 5 projects in Eastern Region, 7 in Northwest Region, 6 in Western Region and 2 for source water protection (Table X). Many of these projects were applicants who had been previously slated for funding in 2015, but due to CZARA reductions, the funds were not allocated. Regional priorities were identified by DEQ NPS and TMDL staff through the original RFP process. The four general focus areas used to develop DEQ project priorities were:

- TMDL Implementation
- 303(d) listings
- Ground Water Management Areas (GWMAs)
- Drinking Water Source Areas

Table X. 319 Projects funded in 2016

List of Projects Recommended for 2016 319 Funding				
REGION	Project Name	Submitted by	Type of project	Budget
ER	2015-16 No-Till Drill for Malheur River Watershed	OSU Extension - Malheur	BMP	$24,904
ER	2015-16 Salmon Safe Certification in Peas/Wheat Agronomic Crop Rotation	OSU Extension - Umatilla	BMP	$22,000
ER	2015-16 Upper Klamath Basin Non-Point Source Education Project	Klamath Watershed Partnership	Outreach & Education	$7,947
ER	2015-16 Getting the Word Out and Making Things Happen in the Malheur River Basin - Phase II	Malheur Watershed Council	Outreach & Education	$20,000
ER	2015-16 Powder Basin Water Quality Monitoring Program - Macro invertebrate Sampling	Powder Basin Watershed Council	Monitoring	$20,000
WR	Coquille Mainstem Cold Water Refugia Monitoring Project	Coos SWCD	Monitoring	$6,000
WR	Coquille SW Master Plan Update with WQ Implement Plan	City of Coquille	TMDL Implementation	$14,136
WR	Siletz Watershed - Monitoring and Assessment 2016-2017	Lincoln SWCD	Monitoring	$24,714
WR	WISE Monitoring Effectiveness Monitoring Project Proposal	Rogue River Watershed Council	Monitoring	$14,000
WR	Storm and Drinking Water Improvements for Cities in the Long Tom WS	Long Tom Watershed Council	Outreach & Education	$30,000
WR	Effectiveness Monitoring of flood sprinkler irrigation conversion, Central Point	Jackson Co SWCD/Patton Environmental LLC	BMP	$6,000
NWR	Upper Nehalem - Riparian Restoration	Upper Nehalem WSC	Riparian Restoration	$13,970
NWR	Tillamook SWCD 2016 Stream Enhancement & Restoration	Tillamook SWCD	Riparian Restoration	$14,980
NWR	Milk Creek Riparian and Stream restoration project	Clackamas SWCD	Riparian Restoration	$14,980

List of Projects Recommended for 2016 319 Funding				
NWR	Nestucca, Neskowin and Sand Lake Watersheds Rip Rest Program	Nestucca, Neskowin and Sand Lake WSC	Riparian Restoration	$14,980
NWR	College Creeks Clean Water Retrofit	Sandy River Basin Watershed Council	Outreach & Education	$14,980
NWR	Scappoose Bay Watershed Restoration Action Plan	Scappoose Bay Watershed Council	Outreach & Education	$5,980
NWR	BYPP 2016-17 - 16-22	TEP	Riparian Restoration	$14,980
SW	DEQ– PSU TMDL Status and Trend Study	PSU	TMDL Implementation	$24,475
SW	PSP	Existing hauler contract	PSP	$24,475
TOTAL				**$333,501**

Summary of 319(h) Projects Completed in 2016

During FY2016, XX of projects were completed with approximately $$$$$ in federal §319 funds. A brief update of each of the implementation projects is provided in the following pages. Details of each project, can be accessed Where????.

Commented [A31]: Provide discussion on whether these were areas where WBPs or equivalents existed.

Project (FYXX)

Project Budget: Federal 319(h): $$$$ Match: $$$ Project Total: $$$
Watershed: XXXX (HUC XXXXX)
Sub-watersheds: XXXXX (HUC XXXXX)
Impairments: TMDL for XXXXX

5. OR Integrated Water Resources Strategy

The Oregon Water Resources Commission adopted the state's first Integrated Water Resources Strategy on August 2, 2012. With leadership, support, and direction from the State Legislature and the Water Resources Commission, Oregon's natural resource agencies set out to develop a statewide, integrated water resources strategy to meet current and future water needs. The Strategy provides a blueprint to help the state better understand and meet its instream and out-of-stream needs, taking into account water quantity, water quality, and ecosystem needs.

Led by the Oregon Water Resources Department, the Department worked closely with the Oregon DEQ and the Oregon Department of Fish and Wildlife to ensure that water quality needs and ecological needs were directly addressed in the plan. The Oregon Department of Agriculture also played a key role in the development of the Integrated Water Resources Strategy.

Oregon's NPS Management Program is also a collaborative effort of federal, state, and local agencies, as well as nonprofits and citizen groups. Leveraged Exemption

Commented [A32]: Talk about leveraged exemption versus previous year's waiver here

In recent years, state and federal funding for DEQ's Clean Water Act work has declined, both in dollar amount and in how far those dollars go to solve watershed issues. In order to make the most of limited resources, DEQ and its state sister agencies have partnered with local watershed councils and SWCDs on monitoring and restoration projects. Partnerships with federal agencies such as NRCS and ODA target agricultural BMPs for restoration and protection in agricultural watersheds.

DEQ partnered with the Bureau of Land Management's (BLM) to craft riparian protections in new Western Oregon Resource Management Plans which were finalized in August 2016. Collaboration between the Oregon Department of Forestry (ODF), Oregon Department of Fish & Wildlife (ODFW) and DEQ continue at the forefront for addressing CZARA related concerns.

State Partners

Oregon Watershed Enhancement Board (OWEB)

The Oregon Watershed Enhancement Board (OWEB) is a state agency that provides grants to help Oregonians protect and restore local streams, rivers, wetlands and natural areas. Their mission is to help protect and restore healthy watersheds and natural habitats that support thriving communities and strong economies. OWEB grants are funded through a combination of the Oregon Lottery, federal dollars, and salmon license plate revenue.

OWEB grants fund a variety of activities that local partners have identified as priorities in watershed assessments, action plans, or regional plans such as ESA Recovery Plans, Groundwater Management Areas, or TMDLs and Water Quality Basin Status and Action Plans. Restoration actions address watershed process and functions necessary to support natural processes that are indicative of healthy watersheds. This includes, but is not limited to improving water quality, water quantity, habitat complexity, flood plain interaction, vegetation structure, and species diversity. The work funded by OWEB addresses nonpoint source pollutants including thermal loading, sediment, bacteria, and nutrients. The state moneys dispersed by OWEB are a critical source on of nonfederal matching funds for 319 grants. Through acquisition grants, vulnerable and ecologically valuable parcels of land are acquired by local governments and nonprofits. DEQ staff sit on regional review teams which evaluate grant proposals and ensure that DEQ needs and priorities are considered in the grant award process. OWEB is a vital partner to DEQ in the reduction of nonpoint source pollution for human activities, past and present.

OWEB's approach focuses on local partnerships and voluntary actions, and builds on what Oregonians are already doing that is good for water, people and wildlife. OWEB provides grants to local watershed councils, soil and water conservation districts, land trusts, tribes, government agencies, and other organizations to restore and protect Oregon's rivers and streams. Since 1999, OWEB has spent over XXX millions of dollars in a statewide, collaborative, and voluntary approach to watershed health. Table X illustrates OWEB's total investment by county for the period of 1999 through 2015, with the majority of those funds going towards on the ground restoration (on average 55%).

Table X. OWEB Investment by County (1999-2015)

County	Total Investment* (1999-2015)	Percent of Dollars toward Restoration
Clatsop	$11,307,205	65.2%
Tillamook	$15,210,239	73.9%
Lincoln	$17,350,148	61.3%
Lane	$32,470,398	76.8%
Douglas	$20,765,518	74.4%
Coos	$21,122,291	67.4%
Curry	$6,405,080	45.3%
Josephine	$9,629,862	69.2%
Jackson	$13,847,645	57.7%
Benton	$10,323,573	71.1%
Linn	$12,191,618	71.0%
Polk	$4,951,348	56.3%
Marion	$4,108,700	37.7%
Yamhill	$2,523,172	39.4%

County	Total Investment* (1999-2015)	Percent of Dollars toward Restoration
Clackamas	$11,985,452	65.3%
Washington	$4,052,667	57.3%
Multnomah	$10,691,333	57.4%
Columbia	$8,172,574	57.2%
Hood River	$6,922,935	79.2%
Wasco	$5,569,993	69.7%
Jefferson	$4,748,132	69.5%
Sherman	$2,781,734	51.0%
Gilliam	$3,075,590	58.5%
Wheeler	$5,709,939	70.8%
Crook	$9,389,520	75.1%
Deschutes	$25,102,227	89.1%
Klamath	$12,819,643	72.7%
Lake	$9,379,060	80.4%
Morrow	$1,094,105	69.9%
Umatilla	$10,598,853	56.4%
Union	$5,879,248	66.1%
Wallowa	$8,679,833	85.0%
Grant	$14,614,205	62.6%
Baker	$9,362,442	72.2%
Harney	$6,690,436	76.3%
Malheur	$20,719,490	83.0%

* Some investments may span multiple counties

Oregon Department of Agriculture (ODA)

In 2012, a Memorandum of Agreement (MOA) was signed between ODA and DEQ. The MOA delegated authority to ODA to implement the Agriculture Water Quality Management Program. In order focus its investments and demonstrate measurable results, ODA established Focus Areas and Strategic Implementation Areas which made investments in small geographic areas. Focus Areas are subwatersheds chosen for intensive voluntary improvement efforts lead by Soil and Water Conservation Districts (SWCD while Strategic Implementation Areas are subwatersheds chosen for intensive surveying, education, and enforcement actions. DEQ works in collaboration with ODA to evaluate area plan and rule implementation effectiveness. % of lands in compliance with area rules Are goals and objectives (milestones) of area plans being met? Summary of ODA complaint response

In addition to the collaboration on Water Quality Management plans, DEQ works with ODA to direct resources to high priority agricultural issues during the grant funding process. Through an EPA "Level of Effort" grant, DEQ is working with ODA to determine the 5-year flow path of groundwater in the Southern Willamette Valley Groundwater Management Area (SWV GWMA). ODA has also funded through Fertilizer grants a lysimeter study in the GWMA to study the effects of nitrate leaching below the root zone and precision agriculture techniques. In addition, ODA works with both EPA and the Natural Resource Conservation Service (NRCS) to support the "National Water Quality Initiative" (NWQI) and provide effectiveness monitoring in the Fifteen Mile and Willow Creek watersheds.

Commented [A33]: Currently being proposed Dec-16; not funded yet.

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Oregon Department of Forestry (ODF)

In 2016, DEQ has worked with ODF and other state and federal agencies to address the gaps outlined in NOAA and EPA's disapproval of Oregon's Coastal Zone Act Reauthorization Amendment (CZARA) The Program was not fully approvable because of gaps in Oregon's program related to forestry to meet or maintain water quality standards and to protect beneficial uses. The four areas that EPA and NOAA identified as needing additional work were: protection of riparian areas for small and medium fish-bearing streams and non-fish bearing streams from increases in stream temperatures; programs to address the impacts of forest roads; programs to identify areas of high landslide risk, and tools to reduce the risk of such landslides; and programs to assure that forest operators are complying with federal law governing the aerial application of herbicides. DEQ has participated in the proposed rule change for stream buffers that would increase stream buffers by ten feet on streams classified as small or medium fish-bearing streams determined to have salmon, steelhead or bull trout present. Provide other Forestry related updates – Josh Seeds?

Federal Partners

United States Forest Service (USFS)

In 2014, DEQ signed a Memorandum of Understanding (MOU) that outlined the DEQ and USFS strategy for managing and controlling point and nonpoint source water pollution from USFS managed lands in the State of Oregon. In the MOU, DEQ recognizes the USFS as a DMA for nonpoint source control and implementation of State and Federal water quality rules and regulations on lands under USFS jurisdiction. The USFS agreed to manage USFS lands to protect, restore and maintain water quality so that State and Federal water quality standards and goals are met in accordance with all applicable laws and regulations. In addition, the USFS will develop and implement strategies such as BMPs to protect and restore water quality conditions when USFS actions affect or have the potential to affect 303(d) listed waters.

2016 Restoration Highlights: showcase examples such as Deer Creek in the Mackenzie, Fivemile-Bell project in the Siuslaw, McKay Creek in Ochoco NF …other potential highlights:
(http://www.fs.usda.gov/detail/siuslaw/landmanagement/resourcemanagement/?cid=fsbdev7_007277)

Bureau of Land Management (BLM)

Similar to the USFS, DEQ entered into a MOU with the BLM to document the BLM and DEQ strategy for managing and controlling point and nonpoint source water pollution from BLM managed lands in the State of Oregon. The MOU defines the process by which the BLM and DEQ will cooperatively meet State and Federal water quality rules and regulations. The BLM agreed to comply with the TMDL Rule and manage BLM lands to protect, restore and maintain water quality so that State and Federal water quality standards and goals are met in accordance with all applicable laws and regulations.
Highlights of work completed by the BLM in 2016 include: South River reforestation, Stouts Creek stabilization, Swiftwater District Instream restoration, Olalla Creek Stream restoration, Rice Creek Instream restoration

Commented [A35]: These are all from the Roseburg district…need other districts…include pictures

United States Army Corps of Engineers (USACE)

Commented [A36]: Do we mention NRCS?

NRCS

The Natural Resources Conservation Service (NRCS) identifies and works in priority watersheds throughout the Nation to improve water quality through the National Water Quality Initiative (NWQI). NRCS provides financial assistance to help producers and ranchers implement conservation practices and systems to reduce water quality pollution from agricultural lands. In Oregon, NRCS has partnered with DEQ, ODA, USFWS and others to identify NWQI watersheds based on needs as well as opportunities. In addition to the implementation of conservation practices, 319 funds are being used to conduct effectiveness monitoring in NWQI watersheds.
Monitoring plans for effectiveness monitoring on NWQI projects, Fifteen Mile Creek and Willow Creek have been developed and implementation is ongoing through 2014-2019.

Provide status update on NWQI watersheds, highlights

Local Partners

The cornerstone of the Oregon water quality program is to identify solutions at the local community level. Watershed Councils, Soil and Water Conservation Districts (SWCDs), Irrigation Districts, cities and counties all play an important part in the state's strategy to protect and restore Oregon waterbodies. Almost all of the funds allocated in 2016 went to Watershed Councils, SWCDs and local partnerships. Some highlights of projects that were completed in 2016 by local partners include: identify project highlights for projects completed in 2016 by local groups

6. Success Stories

WQ-10 and SP-12 Projects

The Section 319 Nonpoint Source Success Stories website features stories about primarily nonpoint source-impaired waterbodies where restoration efforts have led to documented water quality improvements. Waterbodies are separated into three categories of stories, depending on the type of water quality improvement achieved:

- Partially or fully restored waterbodies
- Progress toward achieving water quality goals
- Ecological restoration

The Nonpoint Source Success Stories serve two main purposes. First, they offer an opportunity for states to highlight where their restoration efforts have resulted in water quality improvements in NPS-impaired waterbodies. Second, they allow EPA to track the number of NPS-impaired waterbodies that are partially or fully restored—which is a key measure in the effort to document how NPS restoration efforts are improving water quality across the nation. These measures inform Congress about why 319 funds are needed and document the success of these funds towards improving water quality.

All previous Oregon's Watershed Measures and Waterbody Restoration Stories (i.e."Success Stories") are developed by DEQ staff with assistance from EPA's contractor Tetra Tech. Success stories added in 2016 include: